ZOTAC

ZBOX

SPHERE SERIES

USER'S MANUAL

ZOTAC ZBOX
User's Manual

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Every effort has been made to ensure that the contents of this manual are correct and up to date. However, the manufacturer makes no guarantee regarding the accuracy of its contents, and reserves the right to make changes without prior notice.

CAUTION:
There is a fire risk if the battery is replaced with the incorrect type. Batteries should be recycled where possible. Disposal of used batteries must be in accordance with local environmental regulations.

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Product specifications

- ❑ **Mini PC size**
  - ❖ 154mm x 154mm x 161mm
- ❑ **Microprocessor support**
  - ❖ Intel® Core™ i5-4200U Processor (1.6 GHz, dual core, up to 2.6GHz)
- ❑ **Operating systems:**
  - ❖ Supports Windows 7 x86/x64 and 8.1 x86/x64
- ❑ **System Memory support**
  - ❖ Two 204-pin SO-DIMMs DDR3L 1600/1333
  - ❖ Up to 16 GB of memory
- ❑ **USB Ports**
  - ❖ Four USB 3.0 ports
  - ❖ Three USB 2.0 ports (two from rear, one from right)
- ❑ **Onboard Serial ATA**
  - ❖ SATA 6.0 Gb/s transfer rates
  - ❖ Supports one 2.5-inch SATA HDD or SSD (max 9.5mm height)
- ❑ **Expansion slot**
  - ❖ One mSATA, 6.0 Gb/s transfer rates
- ❑ **Onboard LAN**
  - ❖ Supports 10/100/1000 Mbps operation
  - ❖ Supports IEEE 802.3
- ❑ **WiFi/Bluetooth support**
  - ❖ 802.11ac (dual-band)
  - ❖ High speed wireless connection and enhanced wireless security
  - ❖ Fully qualified Bluetooth v4.0
- ❑ **Onboard Audio**
  - ❖ Stereo analog audio output and Microphone input
- ❑ **Green Function**
  - ❖ Supports ACPI (Advanced Configuration and Power Interface)
- ❑ **Onboard Graphics support**
  - ❖ Intel HD Graphics 4400
  - ❖ HDMI and DP output

Safety information

Your ZOTAC ZBOX is designed and tested to meet the latest standards of safety for information technology equipment. However, to ensure your safety, it is important that you read the following safety instructions.

Setting up your system

- Read and follow all instructions in the documentation before you operate your system.
- Do not use this product near water or a heat source such as a radiator.
- Set up the system on a stable surface with the provided stand. Never use the system alone without the stand.
- Openings on the chassis are for ventilation. Do not block or cover these openings. Make sure you leave plenty of space around the system for ventilation. Never insert objects of any kind into the ventilation openings.
- Use this product in environments with ambient temperatures between 0℃ and 35℃.

☞ If you use an extension cord, please use the UL listed cord and make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.

Care during use

- Do not walk on the power cord or allow anything to rest on it.
- Do not spill water or any other liquids on your system.
- When the system is turned off, a small amount of electrical current still flows. Always unplug all power, modem, and network cables from the power outlets before cleaning the system.
- If you encounter the following technical problems with the product, unplug the power cord and contact a qualified service technician or your retailer.
  - The power cord or plug is damaged.
  - Liquid has been spilled into the system.
  - The system does not function properly even if you follow the operating instructions.
  - The system was dropped or the cabinet is damaged.
  - The system performance changes.

Welcome

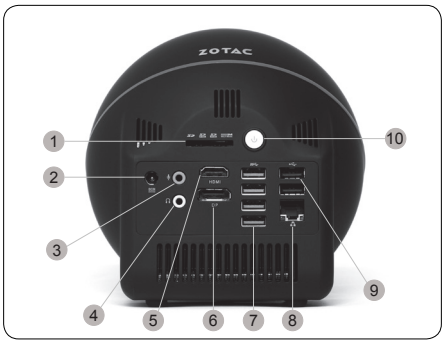
Congratulations on your purchase of the ZOTAC ZBOX. The illustration below displays the package contents of your new ZOTAC ZBOX. If any of the below items are damaged or missing, please contact your retailer.

Package contents

- 1 x ZOTAC ZBOX
- 1 x AC Adapter
- 1 x Power Cord
- 1 x Driver disc
- 1 x USB drive with O/S driver (optional)
- 1 x User Manual & Warranty Card
- 1 x Quick Start Guide

Getting to know your ZOTAC ZBOX

Rear view



Refer to the diagram below to identify the components on the front of the ZBOX

1. Memory card slot

The built-in memory card reader reads SD/SDHC/SDXC/MMC cards used in devices such as digital cameras, MP3 players, mobile phones and PDAs.

2. Power input (DC19V)

The supplied power adapter converts AC power to DC power for use with this jack. Power supplied through this jack supplies power to the PC. To prevent damage to the PC, always use the supplied power adapter.

3. Microphone jack

The microphone jack is designed to connect a microphone for video conferencing, voice narrations or simple audio recordings.

4. Headphone/Audio Out jack

The stereo headphone jack (3.5mm) is used to connect the system's audio output signal to amplified speakers or headphones.

5. HDMI port

The HDMI (High Definition Multimedia Interface) port supports a Full-HD device such as an LCD TV or monitor to allow viewing on a larger external display.

6. DisplayPorts
The DisplayPort outputs support displays with resolutions up to 3840x2160 @ 60Hz.

7. USB 3.0 ports
The USB 3.0 port supports the SuperSpeed USB 3.0 devices and is backwards compatible with USB 2.0/1.1 devices. Use this port for USB 3.0 devices for maximum performance with USB 3.0 compatible devices.

8. Ethernet port
The eight-pin RJ-45 LAN port supports standard Ethernet cable for connections to local area networks (LAN) with speeds of 10/100/1000Mbps.

9. USB 2.0 ports
The USB (Universal Serial Bus) port is compatible with USB devices such as keyboards, mice, cameras and hard disk drives.

10. Power switch
The power switch allows powering ON and OFF the system.

Installing hardware inside the ZOTAC ZBOX

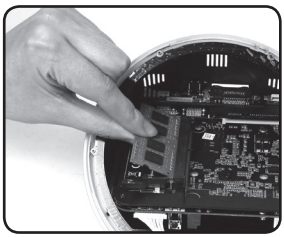
Before installing hardware, please follow the instructions below to remove the cover of your ZOTAC ZBOX.

1. Hold the ZOTAC ZBOX with two hands, and rotate the cover counterclockwise.

2. Make sure to press the stripe located at the “Unlock” logo, and remove the cover off the ZOTAC ZBOX.

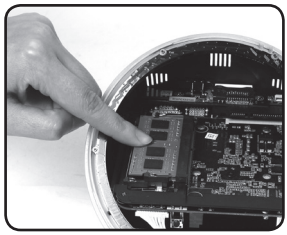
Installing a memory module

1. Locate the SO-DIMM memory slots and insert a SO-DIMM memory module into the slot at a 45 degree angle.



Note: When installing two SO-DIMM memory modules, please insert a module into the lower slot first.

2. Gently press down on the memory module until it locks into place by the arms of the memory slot.

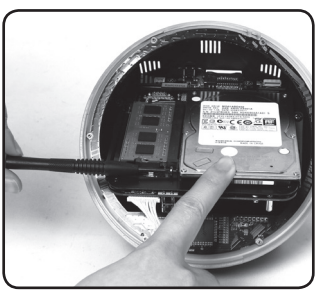


Note: This ZOTAC ZBOX accomodates two DDR3 SO-DIMM memory modules. You must install at least one module for the system to function.

Installing a hard disk

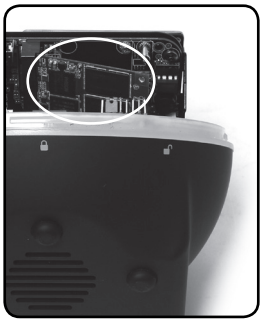
1. Insert the hard disk into the slot at a 45 degree angle and gently slide into the connector.

2. Install the screw.

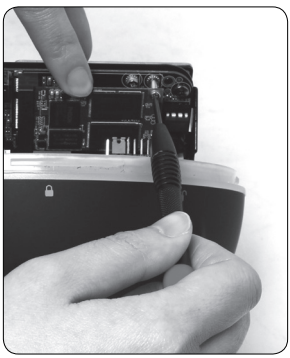


Installing mSATA SSD module

1. Locate the mSATA SSD slot and insert an mSATA SSD module into the slot at a 45 degree angle.



2. Gently push the mSATA SSD module toward the board and install the screw.



Setting up your ZOTAC ZBOX

Please connect your peripherals before using your ZOTAC ZBOX

1. **Connecting to a network**
   Connect one end of a network cable to the LAN port on the system rear panel and the other end to a network router, hub or switch.
2. **Connecting to USB devices**
   Connect USB devices such as external hard drives, SSDs and flash drives to the USB port.
3. **Connecting a DisplayPort display**
   Connect the DisplayPort connector to the DP port of the monitor or display.
4. **Connecting to an HDMI display**
   Connect one end of an HDMI cable to an HDTV or monitor, and the other end to the HDMI port on the system rear panel.
5. **Connecting the power adapter and turning on the ZBOX**
   Connect the supplied AC adapter to the DC IN jack on the system rear panel and then press the power switch on the front panel to turn on the system.

☞ When your ZOTAC ZBOX is not in use, unplug the power adapter or switch off the AC outlet to conserve power.

Installing drivers and software

Installing an operating system

The ZOTAC ZBOX does not ship with an operating system preinstalled. The user must install the operating system before the ZOTAC ZBOX can be used. The following operating systems are supported:

- Windows 7
- Windows 8

Follow the instructions below to install an operating system:

1. Attach external DVD drive via USB port.
2. Insert disk for operating system (Windows or Linux).
3. Wait for the ZOTAC ZBOX to boot from the disk.
4. Follow the onscreen directions to install the operating system.
5. Install system drivers to gain full functionality of the ZOTAC ZBOX hardware and features.

Installing system drivers

Before you can use the full features of the ZOTAC ZBOX, the system drivers must be installed. The following types of operating systems are supported by the ZOTAC ZBOX driver DVD and USB flash drive:

- Windows 7
- Windows 8

Follow the instructions below to install the system drivers:

1. Insert the ZOTAC ZBOX driver DVD or driver USB flash drive. If autorun is enabled, the driver installation main menu will show up automatically. If autorun is disabled, you may click the file Launch.EXE to bring up the driver installation main menu.
2. The following drivers are available on the DVD and USB flash drive:
   - Intel Chipset Driver
   - HDA Sound Driver
   - Intel Graphics Driver
   - Ethernet PCI-E Driver
   - USB3.0 Controller Driver
   - Intel Management Engine
   - Wireless Network Driver
   - Bluetooth Driver
   - USB Charger (optional)
   - Intel Rapid Storage Technology Driver (optional)

Note:

1. If you want to use high-amperage USB charging for smartphones and tablets, please install the driver USB Charger driver.

2. If you want to use Intel Rapid Storage Technology, please install the driver at X:\AHCI RAID\SetupRST\setup.exe (X: your driver disk letter).

☞ Each driver must be installed individually to ensure proper operation of the ZOTAC ZBOX.

3. Select the driver you want to install. The driver installer should launch.
4. Follow the onscreen instructions to install the drivers.
5. Restart the system.

Using your ZOTAC ZBOX

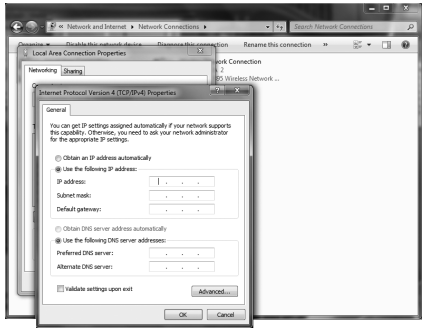
Configuring a wireless connection

Please follow the instructions below to connect to a wireless network:

1. Double-click the wireless network icon (pic) in the notification area.
2. Select the wireless network you want to connect to from the list and click Connect.
3. After connection is established, you will see “Connected.”
   Note 1: For security concerns, Do NOT connect to an unsecured network, otherwise, the transmitted information without encryption might be visible to others.
   Note 2: Enter the network security key if necessary.

Configuring a wired connection

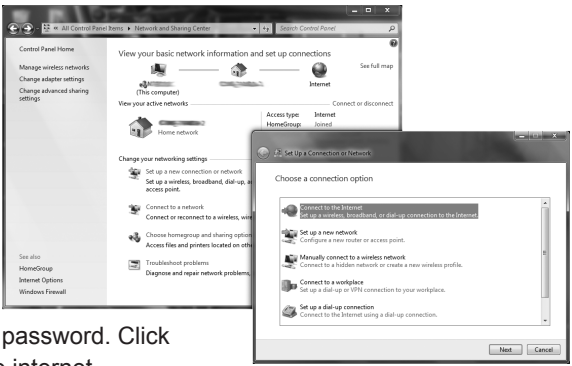
Using a static IP



1. Right-click the network icon in the notification area and select “Open Network Connections”.
2. Right-click “Local Area Connection” and select “Properties”.
3. Highlight “Internet Protocol (TCP/IP)” and click “Properties”.
4. Select “Use the following IP address”.
5. Enter your IP address, subnet mask and Default gateway.
6. Enter the preferred DNS server address if necessary.
7. After entering all of the related values, click “OK” to finish the configuration.

Using a dynamic IP (PPPoE connection)

1. Repeat Step 1-3 in the previous section.
2. Select “Obtain an IP address automatically” and click “OK”.
3. Click “Create a new connection” to start the NEW Connection Wizard.
4. Click “Next”.
5. Select “Connect to the Internet” and click “Next”.
6. Select “Set up my connection manually”.
7. Select your connection type and click “Next”.
8. Enter your ISP Name and click “Next”.
9. Enter your User name and Password. Click “Next”.
10. Click “Finish” to finish the configuration.
11. Enter your user name and password. Click “Connect” to connect to the internet.

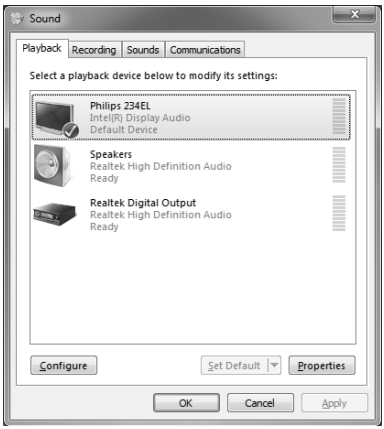

View your basic network information and set up connections
Choose a connection option
Connect to the Internet
Set up a new network
Manually connect to a wireless network
Connect to a workplace
Set up a dial-up connection
Next
Cancel

Note: Contact your internet Service Provider (ISP) if you have problems connecting to the network.

Configuring audio output

Follow the steps below to enable audio output when connecting the ZOTAC ZBOX to a TV or receiver via HDMI.

1. Access the Sound settings via the system Control Panel.
2. Under Playback devices, click the display device that corresponds with your audio compatible display.
3. Click the “Set Default” button in the lower right hand corner.
4. Click “OK” to exit the setup.



Intel Rapid Storage Technology

Introduction

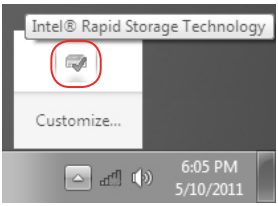
Intel Rapid Storage Technology is a Windows-based application that provides improved performance and reliability for systems equipped with SATA disks for desktop, mobile, and server platforms. When using one or multiple SATA disks, you can take advantage of enhanced performance and lower power consumption. When using more than one disk, you can increase protection against data loss in the event of disk failure.

Note: 1. Please confirm that the driver:* Intel Rapid Storage Technology *has been installed completely before you set the following configuration.
2. There must be an SSD as cache volume to set Intel Rapid Storage.

Setting up Intel Rapid Storage Technology

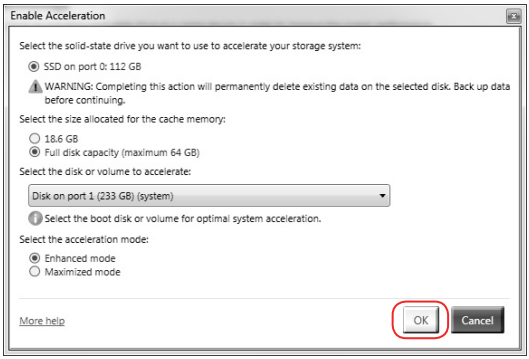
Follow the instructions below to set Intel Rapid Storage.

1. Click the icon in the lower right corner of the desktop.

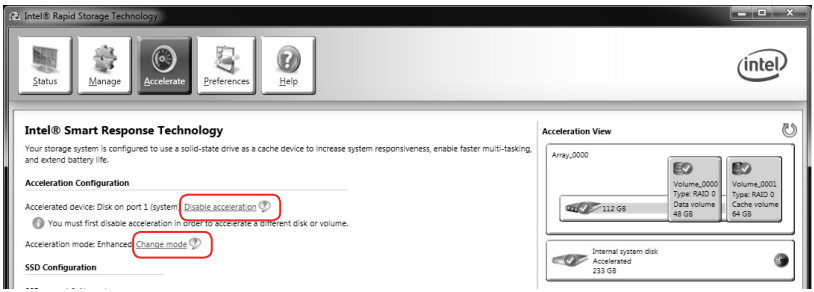


2. Enter the "**Accelerate**" menu, and click "**Enable acceleration**".

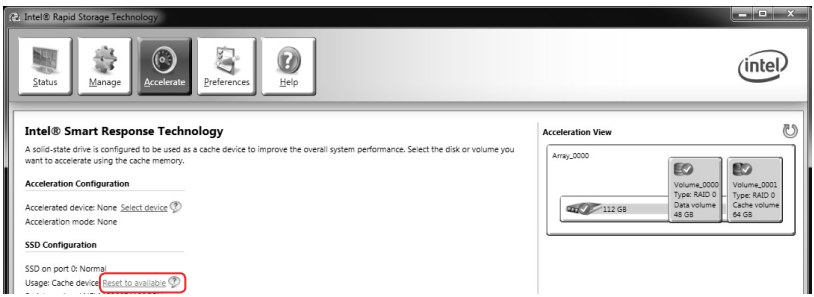
3. When the window “**Enable Acceleration**” displays, select the cache memory size and the acceleration mode, and click “**OK**” to accelerate the storage.


Enable Acceleration
Select the solid-state drive you want to use to accelerate your storage system:
SSD on port 0: 112 GB
WARNING: Completing this action will permanently delete existing data on the selected disk. Back up data before continuing.
Select the size allocated for the cache memory:
18.6 GB
Full disk capacity (maximum 64 GB)
Select the disk or volume to accelerate:
Disk on port 1 (233 GB) (system)
Select the boot disk or volume for optimal system acceleration.
Select the acceleration mode:
Enhanced mode
Maximized mode
More help
OK
Cancel

4. If you want to change the setting, click “**Disable acceleration**” to disable the acceleration, or click “**Change mode**” to change the acceleration mode.



5. If you want to reset cache to available, click “**Reset to available**”.



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